

**TABLE M.5.6.1.2–4.—National Ignition Facility Accident Frequency and Consequence
(Unfavorable Meteorology)**

| Accident | MEI | | | Offsite Population ^a | | Individual Noninvolved Worker | | Noninvolved Worker Population | |
|--|-----------------------|-----------------------|-----------------------|---------------------------------|-----------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|
| | Frequency (per year) | Dose (rem) | LCFs ^b | Dose (person-rem) | LCFs ^c | Dose (rem) | LCFs ^b | Dose (person-rem) | LCFs ^c |
| Earthquake during No Action Alternative operations | 2.00×10^{-8} | 6.15×10^{-3} | 3.69×10^{-6} | 3.05 | 1.83×10^{-3} | 1.33×10^{-2} | 8.01×10^{-6} | 2.22 | 1.33×10^{-3} |
| Earthquake during depleted uranium shot | 2.00×10^{-9} | 1.10×10^{-2} | 6.57×10^{-6} | 4.51 | 2.71×10^{-3} | 2.25×10^{-2} | 1.35×10^{-5} | 3.74 | 2.24×10^{-3} |
| Earthquake during highly enriched uranium shot | 2.00×10^{-9} | 1.14×10^{-2} | 6.84×10^{-6} | 4.67 | 2.80×10^{-3} | 2.33×10^{-2} | 1.40×10^{-5} | 3.83 | 2.30×10^{-3} |
| Earthquake during thorium shot | 2.00×10^{-9} | 1.14×10^{-2} | 6.86×10^{-6} | 4.76 | 2.86×10^{-3} | 2.31×10^{-2} | 1.39×10^{-5} | 4.10 | 2.46×10^{-3} |
| Earthquake during tracer shot | 2.00×10^{-9} | 7.02×10^{-3} | 4.21×10^{-6} | 3.26 | 1.95×10^{-3} | 1.52×10^{-2} | 9.14×10^{-6} | 2.44 | 1.46×10^{-3} |
| Earthquake during plutonium without yield shot | 2.00×10^{-9} | 2.16×10^{-2} | 1.30×10^{-5} | 8.33 | 5.00×10^{-3} | 4.69×10^{-2} | 2.82×10^{-5} | 8.23 | 4.94×10^{-3} |
| Earthquake during plutonium with yield shot | 2.00×10^{-9} | 1.16×10^{-2} | 6.96×10^{-6} | 4.98 | 2.99×10^{-3} | 2.50×10^{-2} | 1.50×10^{-5} | 4.27 | 2.56×10^{-3} |

Source: LLNL 2003d.

^aBased on the population of approximately 6,900,000 persons residing within 50 miles of LLNL.^bIncreased likelihood of a latent cancer fatality.^cIncreased number of latent cancer fatalities.

LCFs = latent cancer fatalities; MEI = maximally exposed individual.